# Nursing Interventions & Outcomes in 3 Older Populations. Marita Titler, PhD

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#### **BACKGROUND / RATIONALE:**

As competition for health services increase, understanding the relationship between interventions and patient outcomes is essential. Nursing interventions are not accounted for in standardized coding schemas, and thus, are rarely included in outcomes effectiveness studies that use large electronic datasets. The recent implementation of standardized classification systems of nursing interventions, such as Nursing Interventions Classification, now makes it possible to describe the contributions of nursing care to patient outcomes. Research in this area has been limited due to availability of clinical data repositories that include nursing care variables. The site for this proposed study, the University of Iowa Hospitals and Clinics, has a large electronic database of nursing interventions accumulated over 3 years that can be accessed and linked, at the individual patient level, to other clinical and operational data. The purpose of this 4 year exploratory study is to evaluate a methodological approach for conducting nursing outcomes effectiveness research using existing clinical and operational data that reside in electronic data repositories.

## **OBJECTIVE(S):**

The study's four aims are to:

- 1. Identify frequently used nursing diagnoses, nursing interventions, pharmacological treatments, and medical treatments for hospitalized elderly with DRG 127 or 209; and for those who receive the Fall Prevention nursing intervention.
- 2. Describe the relationships among patient characteristics, patient clinical conditions (nursing diagnoses, medical diagnoses, severity of illness), treatments (nursing interventions, medical treatments, pharmacological treatments), characteristics of nursing units, and outcomes of hospitalized elderly patients using a cross sectional, retrospective design.
- 3. Compare the cost of acute care for patients a) who receive the nursing intervention Fall Prevention with those who do not receive this nursing intervention, b) who receive the most frequently used nursing treatment for heart failure with those who do not receive this intervention, and c) who receive the most frequently used nursing treatment for hip fracture with those who do not receive this intervention.
- 4. Develop a guideline for construction and use of a nursing effectiveness research database built from electronic data repositories.

#### **METHODS:**

Specific variables will be identified and examined in three elderly patient groups: DRG 127 - Heart Failure and Shock, DRG 209 - Major Joint and Limb Reattachment Procedures of the Lower Extremity (Hip Fracture), and those who are recipients of the nursing intervention Fall Prevention.

### **STATUS:**

We are collecting data.

#### **IMPACT:**

The process and results of this study will be used to formulate a guideline for investigators on the construction and use of a nursing effectiveness research database built from electronic data repositories.

# **PUBLICATIONS:**

None at this time.